

# Constraints In Oracle

**Note: Please watch my YouTube sessions to better understand the descriptions and queries below**

Data validation before inserting the data into the table

## 1. Primary Key

- It will not allow duplicate value
- It will not allow null
- Only one primary key in a table

e.g emp\_id, prod\_id, cust\_id, user\_id, account\_no

composite Key:

cust\_id+mobile\_no ---> Primary key(cust\_id,mobile\_no)

## 2. Not Null \*mandatory field

- It will not allow a null value
- It will allow duplicate

e.g First\_name

## 3. Unique Key

- It will not allow duplicate
- It will allow null

e.g mobile\_no

#### 4. Check

-- data validation

check (age >=18)

#### 5. Foreign Key

--- Relationship between two tables

-- It will accept duplicate value

-- It should be a primary key in another table

-- Any no of foreign key in a table

e.g foreign key (city\_id) references city(city\_id)

#### Violation:

Integrity constraint violated - parent key not found

#### 6. Default

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#### Queries to practice:

create table customer

(

cust\_id number(6) primary key,

cust\_name varchar2(30) not null,

mobile\_no number(10) unique check (length(mobile\_no)=10),

age number(3) check (age>=18),

```
city_id number(4) references city(city_id)
);
```

```
select * from city;
```

```
create table city
(
city_id number(4),
city_name varchar2(30)
);
```

```
insert into city values (10,'Chennai');
```

```
insert into city values (20,'Pune');
```

```
insert into city values (30,'Hyd');
```

```
insert into city values (40,'Delhi');
```

```
alter table city add primary key(city_id);
```

```
select * from city;
```

```
select * from customer;
```

```
insert into customer values (100000,'Arun',9090909090,28,20);
```

```
insert into customer values (100001,'Arun',8080808080,31,30);
```

```
insert into customer values (100002,'Vijay',5050505050,31,10);
```

```
insert into customer values (100003,'Ajith',2894738243,13,30);
```

```
insert into customer values (100004,'Ramesh',2894738789,31,60);
```

```
commit;

desc customer;

select * from all_constraints where owner='HR' and table_name='CUSTOMER';

select * from all_cons_columns where owner='HR' and table_name='CUSTOMER';


select
a.owner,a.constraint_name,a.constraint_type,b.table_name,b.column_name
from all_constraints a , all_cons_columns b where a.constraint_name=b.constraint_name
and a.owner='HR' and a.table_name='CUSTOMER';
```

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#### **On delete cascade**

```
ALTER TABLE customer
drop CONSTRAINT SYS_C009091;
```

```
ALTER TABLE customer
ADD CONSTRAINT city_fk
FOREIGN KEY (city_id)
REFERENCES city(city_id)
ON DELETE CASCADE;
```

```
select * from all_constraints where owner='CORE' and table_name='CUSTOMER';
```

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--Metadata tables will have all table & column level details

```
select * from all_tables where owner='HR';

select * from all_tab_columns where owner='HR' and column_name='SALARY';
```

```
create table country
(
cust_country_code varchar2(2) primary key,
country_name varchar2(30)
);
```

```
insert into country values('IN','India');
insert into country values('IN','USA');
drop table country;
```

```
create table customer
(
cust_id number(6),
cust_name varchar2(30) not null,
mobile_no number(10),
age number(3) check (age>=18),
city_id number(4) references city(city_id),
primary key(cust_id,mobile_no)
);
```

```
insert into customer values (100000,'Arun',9090909090,28,20);
insert into customer values (100000,'Arun',9090909091,28,20);
insert into customer values (100000,'Arun',9090909090,28,20);
select * from customer;
```

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## NiC IT Academy YouTube Videos for reference

● Oracle SQL Tutorial - English

[https://youtube.com/playlist?list=PLsphD3EpR7F9mmtY2jBt\\_O8Q9XmvrhQEF](https://youtube.com/playlist?list=PLsphD3EpR7F9mmtY2jBt_O8Q9XmvrhQEF)

● Oracle SQL - தமிழில்

[https://youtube.com/playlist?list=PLsphD3EpR7F-u4Jjp\\_3fYgLSsKwPPTEH4](https://youtube.com/playlist?list=PLsphD3EpR7F-u4Jjp_3fYgLSsKwPPTEH4)

### ✦ Oracle SQL Day wise Video: ENGLISH

Oracle SQL Tutorial - Day 1 - <https://youtu.be/hLnKjYGr730>

Oracle SQL Tutorial - Day 2 - <https://youtu.be/XpgjXvnfZec>

Oracle SQL Tutorial - Day 3 - <https://youtu.be/TmYqeFfHyyc>

Oracle SQL Tutorial - Day 4 - <https://youtu.be/tYQfBgUCpol>

Oracle SQL Tutorial - Day 5 - <https://youtu.be/4qJxQuHLC4>

Oracle SQL Tutorial - Day 6 - <https://youtu.be/CkaqluC2afE>

Oracle SQL Tutorial - Day 7 - <https://youtu.be/BSiCWzj-py8>

Oracle SQL Tutorial - Day 8 - <https://youtu.be/KtUCyG2cZe4>

Oracle SQL Tutorial - Day 9 - <https://youtu.be/B0JbGbWsEIA>

Oracle SQL Tutorial - Day 10 - <https://youtu.be/gRC3ndWLsoo>

Views in Oracle - Day 11 - <https://youtu.be/m8a1UtOmd5k>

Indexes in Oracle - Day 12 - <https://youtu.be/reL2O-kvNxc>

Regular Expression - Day 13 - [https://youtu.be/k\\_Eo08vLPhU](https://youtu.be/k_Eo08vLPhU)